**2.2 Multiplying decimals**

**Your name (ton nom) (onamae wa):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Without calculating the answer, place the decimal in the correct position (show how you estimated)
2. 6.8 x 12.2 = 8296
3. 48.6 x 0.9 = 4374
4. Thin wood for building a tech deck skate park sells for $3.20 per meter. The tech deck fan club ( you know who I’m talking about!!!) want to build a little skate park to keep in the classroom and play with at lunch. They require 2.6 meters of thin wood for the first phase of the park.
5. Use front end estimation to find the approximate cost
6. Come up with an estimation technique to overestimate the cost of the skate park project.
7. When estimating cost, is it better to underestimate or overestimate? Explain why.
8. Calculate the actual cost of the thin wood for this project.
9. Estimate and then calculate.
10. 1.75 x 3 =
11. 270 x 0.1 =
12. 13.8 x 2.5 =
13. Mikah’s tech deck ramp has a mass of 8.7 grams. If a real ramp has a mass 150 times greater than the toys ramp, how much does it weigh?
14. a) Matt and Brayden are amazing mountain climbers and sure showed Kidd a thing or two about hiking at Dry Island Buffalo Jump. On their little detour up the mountain they were climbing at a pace of 2.17 meters per second. How far did they get after climbing for 5 seconds?
15. Use estimation to verify that your answer is reasonable.
16. Quintin played it safe and did a little sliding in the right direction. If he slid down the hill at a rate of 4.23 meters per second and slid for 1.56 seconds, how far did he go?
17. True or False ….Bandaids are useful things to have with you while hiking down V shaped valleys
18. Wow…did you know that 32 x 86 = 2752!!! Use your knowledge of place value to find each of the following products without actually multiplying
19. 3.2 x 86 =
20. 32 x 8.6 =
21. 0.32 x 86 =
22. 0.32 x 8.6 =
23. 3.2 x 8.6 =

1. a) Looking at your answers above, is there a pattern for determining where to place the decimal?

b)What do you notice about multiplying by a number less than 1?